DATE

LO: To describe how shadows form depending if objects are opaque, translucent and transparent.

Starter:

Light source are: fireflies ruler plant

Reflective object: golf bag mirror fireplace

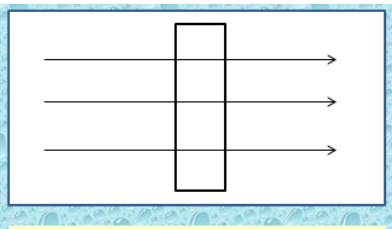
Intriguing question:

Why can I see through a window but not a door?

Clip

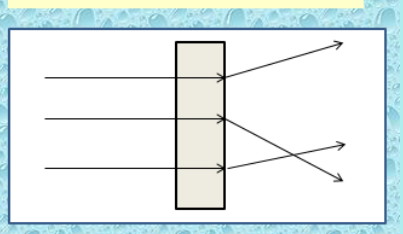
https://www.youtube.com/watch?v=W5k_S8N0pFo&t=58s

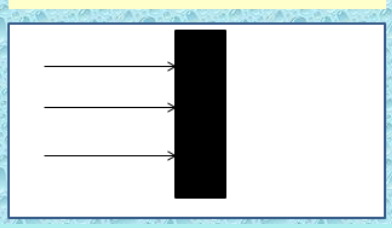
What was surprising was the frog?



Transparent – these are materials which let all of the light straight through.

Translucent – these materials let light through but it is randomly scattered.





Opaque – these materials let no light through.

Transparent	Translucent	Opaque

Go around the room and classify any materials that you can find.

Are there any more that you can think of?

Glossary:

common - often

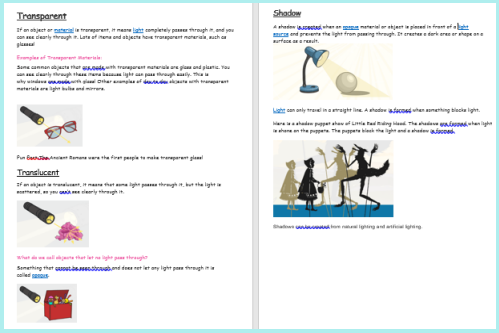
opaque - light doesn't go through the object

prevents - stops

scattered - all over.

translucent - let's some light through

transparent - eye-through, let's light through.



Transparent

If an object or material is transparent, it means light completely passes through it, and you can see clearly through it. Lots of items and objects have transparent materials, such as glasses!

Examples of Transparent Materials:

Some common objects that are made with transparent materials are glass and plastic. You can see clearly through these items because light can pass through easily. This is why windows are made with glass! Other examples of day-to-day objects with transparent materials are light bulbs and mirrors.

Fun Fact: Ancient Romans were the first people to make transparent glass!

Translucent

If an object is translucent, it means that some light passes through it, but the light is scattered, so you can't see clearly through it.

What do we call objects that let no light pass through?

Something that cannot be seen through and does not let any light pass through it is called opaque.

Shadow

A shadow is created when an opaque material or object is placed in front of a light source and prevents the light from passing through. It creates a dark area or shape on a surface as a result.

Light can only travel in a straight line. A shadow is formed when something blocks light.

Here is a shadow puppet show of Little Red Riding Hood. The shadows are formed when light is shone on the puppets. The puppets block the light and a shadow is formed.

Shadows can be created from natural lighting and artificial lighting.

1st read: answer questions in books.

WE DO: What is a transparent object?

WE DO: What does translucent mean?

YOU DO: What is it called when light can not pass through an object?

YOU DO:How is a shadow created?

2nd read: Create sentences using this word bank

Sentence starters	Word bank
An object is transparent when…. An object is translucent when…….. An object is opaque when……	All light No light Some light Blocks Absorbs See-through Clear Vague Blurry Less bright See Reflected Passes through